

**REMARKS**

Claims 1-21 are pending in this application with claims 14 and 20 being amended by this response.

**Rejection of Claims 4 and 13 under 35 U.S.C. § 112, first paragraph**

Claims 4 and 13 are rejected under 35 U.S.C. 112, first paragraph because the specification is not enabling. The Examiner states that the specification, on page 7, lines 29 – 31, does not support every condition listed therein but rather only supports one condition of the group. The specification has been amended to conform to the language as contained in originally filed claims 4 and 13. Specifically, page 7, lines 29-31 have been amended to recite that “An interruption condition includes at least one of (a) a fault condition, (b) an abnormal operation condition and (c) a commanded interrupt condition.” Support for this amendment can be found in originally filed claims 4 and 13 as well as throughout the specification. In view of the above remarks and amendment to the specification, it is respectfully submitted that the claims 4 and 13 are fully enabled by the specification. Thus, it is further respectfully submitted that this rejection is satisfied and should be withdrawn.

**Rejection of Claim 10 under 35 U.S.C. § 112, first paragraph**

Claim 10 is rejected under 35 U.S.C. 112, first paragraph because the specification is not enabling. The Examiner states that the present specification on page 7, lines 40-41 continued on page 8, lines 5-6 does not support every visual device in the group but rather one visual device of the group. Therefore, the specification has been amended to conform the language in the above mentioned lines of the specification with the language contained in originally filed claim 10. Specifically, the specification has been amended to state “The status indications may alternatively be displayed as at least one of a hierarchically ordered indications in the form of a visible progressive illuminated bar indicator, as non-LED illuminations, as an audible indication and another form of display.” Support for this amendment can be found in

originally filed claim 10 as well as throughout the specification. In view of the above remarks and amendment to the specification, it is respectfully submitted that the claim 10 is fully enabled by the specification. Thus, it is further respectfully submitted that this rejection is satisfied and should be withdrawn.

**Rejection of Claims 1, 4-7, 10, 13, 14, and 16 under 35 U.S.C. § 102(b)**

Claims 1, 4-7, 10, 13, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (U.S. Patent No. 5,202,914).

The present claimed invention recites a method and system for capturing an indication of system status in a modem performing a sequence of operations including groups of one or more individual operations having an associated status indication. The present claimed invention involves generating hierarchically ordered status indications reflecting the status of completion of sequentially performed groups of operations in which individual status indications are associated with corresponding groups of operations. The generated status indications are captured and retained following initiation of repetition of the groups of operations and are provided as identification of an attained operational status of the system for operation diagnosis. Similar limitations are found in both independent claims 1 and 13.

Kim et al. recites a system for automatically and remotely recharging a postage meter. The system establishes communication with existing electronic postage meters, obtains necessary information from the postage meters, compiles information to form a message, transmits the message to a remote data processing system via telephone (modem), and receives in response a recharging code. The system transmits the recharging code to the electronic postage meter, which tests the validity of the code, and increments the meter descending register to affect the recharge.

It is respectfully submitted that the system in Kim et al. does not anticipate claim 1 of the present claimed invention as Kim et al. neither disclose nor suggest a method for capturing indication of system status as in the present claimed invention.

Specifically, Kim et al. neither disclose nor suggest “capturing said generated status indications” as in the present claimed invention. Furthermore, Kim et al. neither disclose nor suggest retaining said captured status indications following an initiation of repetition of said groups of operations” as in the present claimed invention. Applicant respectfully disagrees with the Examiner’s interpretation of column 5, lines 7 – 11. The Examiner is correct when he states that Kim et al. disclose an array of LED’s to show the state of the system. However, showing the state of the system is not “capturing said generated status indication” as claimed in claim 1 of the present invention. In fact, what Kim et al. disclose in column 5, lines 7 – 11 is displaying the state of the system. Additionally, it is respectfully submitted that displaying the system state as disclosed by Kim et al. is **not** the same as “retaining said captured status indications” as in the present claimed invention. In the present claimed invention “said retained captured status indications” are provided “as identification of an attained operational status of said system for system operation diagnosis”. The system disclosed by Kim et al. merely displays the result of a self test as “an error code” which will vary depending on which self test fails (see column 5, lines 10 – 25). Thus, it is respectfully submitted that it is clear that generated ordered status indications by the system in Kim et al. are not equivalent to the retained captured status indications of the present claimed invention.

Also, Kim et al. neither disclose nor suggest that the retained captured status indications “follow[ing] initiation of repetition of said group of operations” as in the present claimed invention. Thus, the present claimed invention retains and provides the retained captured status indication after the group of operations is repeated. This allows the present claimed invention to have “s sequence of operational levels having corresponding status indications which are captured prior to a fault or other abnormal condition and retained during re-cycling of initialization for use in fault or operation analysis.” (see page 2 of the specification). Rather, Kim et al. merely disclose status indications being displayed by LED’s. The present claimed invention discloses “providing said retained captured status indications as identification of an attained operational status of said system for system operation diagnosis.” On the other hand, Kim et al. merely discloses providing indications that an error condition exists (see column 5, lines 10 – 25).

Furthermore, in the Examiner's response to Applicants arguments, the Examiner states that the power-up tests are a sequence of operations as claimed in claim 1 of the present invention. However, the sequence of operations identified by the Examiner are not treated in the same manner as the sequence of operations of the present claimed invention. This is clearly shown in Figure 7a of Kim et al. Therein, Kim et al. disclose performing the power-up tests identified by the Examiner. However, unsuccessful performance of a sequential step merely results in an error code causing an LED (or combination thereof) to blink. Once the LED is set to blink, there is no "initiation of repetition of said groups of operation" as in the present claimed invention. Therefore, the status is merely provided upon reaching the erroneous condition. Thus, Kim et al. neither disclose nor suggest "capturing said generated status indication; retaining said captured status indication...; and providing said retained captured status indications as identification of an attained operational status of said system for system operation diagnosis" as in the present claimed invention.

Regarding claim 13, Kim et al. neither disclose nor suggest "capturing said generated status indications" as in the present claimed invention. Additionally, Kim et al. neither disclose nor suggest "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention. As discussed above, Kim et al. merely discloses detecting an error condition and illuminating an LED (or combination of LED's) in order to display the existence of an error condition. It is respectfully submitted that illuminating the LED's in Kim et al. is not the same as "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention. Furthermore, as shown in Figure 7a, Kim et al. disclose that upon an error condition being detected, the LED is illuminated. Unlike the present claimed invention, the captured status indications are not retained "following initiation of repetition of said groups of operations" as in the present claimed invention.

In view of the above remarks, it is respectfully submitted that claims 1 and 13 of the present claimed invention are not anticipated by Kim et al. As claims 4-7, 10, 14,

and 16 are dependent on either claims 1 or 13 it is respectfully submitted that these claims are also patentable. It is thus further respectfully submitted that this rejection is satisfied and should be withdrawn.

**Rejection of claim 2 under 35 U.S.C. 103(a)**

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., and further in view of the ACM6000EB Cable Modem User's Manual ("User's Manual").

As discussed above, Kim et al. neither disclose nor suggest "capturing said generated status indications" as in the present claimed invention. Additionally, Kim et al. neither disclose nor suggest "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention. As discussed above, Kim et al. merely discloses detecting an error condition and illuminating an LED (or combination of LED's) in order to display the existence of an error condition. Illuminating the LED's in Kim et al. is not the same as "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention.

The User's Manual cited by the Examiner provides instructions to the user of an ASUSTeK® cable modem. The User's Manual discloses LED indicators used to indicate status of certain connections, for example, power on/off status, registration status, cable link status, PC link status, and test status. The Examiner states that page 7 of the User's Manual discloses "hierarchically ordered status indications". Applicant respectfully disagrees with the Examiner's interpretation of the User's Manual. In fact, page 7 of the User's Manual merely lists the various LED indicators and how to interpret different activation states of the LED's. While the LED's are numbered 1 through 5, the User's Manual does not disclose that "said generating step generates hierarchically ordered status indications" as in the present claimed invention.

Therefore, similarly to Kim et al., the User's Manual does not disclose nor suggest "capturing said generated status indications" as in the present claimed invention. Additionally, Kim et al. neither disclose nor suggest "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention..

The Examiner, in his response to Applicant's arguments, states that the User's Manual suggestion on page 7 to contact customer support has nothing to do with the invention as claimed in claim 2. However, Applicant respectfully disagrees because the present claimed invention includes the step of "retaining said captured status indications following initiation of repetition of said groups of operations; and providing said retained captured status indications as identification of an attained operational status of said system for system operation diagnosis". If the test light is illuminated, then an error exists and the proper corrective step is either resetting the modem or contacting support. The User's Manual neither discloses nor suggests "retaining said captured status indication following initiation of repetition of said groups of operations" as in the present claimed invention. Rather the test light is similar to the LED's of Kim et al. wherein illumination thereof is a display which is indicative of an error condition.

In view of the above remarks, it is respectfully submitted that the User's Manual adds nothing when taken alone or in combination with Kim et al. that would make the present claimed invention unpatentable. Therefore, it is respectfully submitted that this rejection is satisfied and withdrawal of rejection under 35 U.S.C. 103(a) of claim 2 is respectfully requested.

**Rejection of claim 8 under 35 U.S.C. 103(a)**

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., and further in view of Feagans (U.S. Patent No. 6,366,297).

As discussed above, Kim et al. neither disclose nor suggest "capturing said generated status indications" as in the present claimed invention. Additionally, Kim et

al. neither disclose nor suggest “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention. As discussed above, Kim et al. merely discloses detecting an error condition and illuminating an LED (or combination of LED’s) in order to display the existence of an error condition. Illuminating the LED’s in Kim et al. is not the same as “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention.

Further, Kim et al. neither disclose nor suggest “displaying said retained captured status indications to a User of said system” as in the present invention. On the other hand, Kim et al. states in column 9 and in Figure 7c that an error condition is stored and the system exits. Kim et al. does not suggest that the stored error code be displayed but rather, the system is to exit upon receiving the error code. Thus, there is no diagnostic feature contemplated by the system of Kim et al.

Feagans discloses a system and method for displaying information from a device on a display screen using a graphical user interface of a terminal program. However, Feagans neither discloses nor suggests “a bi-directions communications system for performing a sequence of operations” as in the present claimed invention. Rather, Feagans discloses an external system running on an operating system which is capable of multitasking that is connected to a device wherein the external system is able to connect to the device and access the functions and status associated therewith. Thus, similarly to Kim et al., Feagans neither discloses nor suggests “capturing said generated status indications” as in the present claimed invention. Also, similarly to Kim et al., Feagans neither discloses nor suggests “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention. Rather, Faegans discloses being able to access, detect and display a devices status.

Also, Applicant respectfully disagrees with the Examiner’s motivation for combining Feagans with Kim et al. The Examiner states that Kim et al. discloses storing an error condition but does not disclose “that the memory is accessible by a

User of the system”. However, as discussed above, and is shown in Figure 7c Kim et al. clearly disclose that the system exits upon storing the error condition. Therefore, it is clear that Kim et al. had no intention of further using the stored error code and thus, it would be improper to combine a reference that concerns accessing a device status and displaying the status of the device such as Feagans. As Kim et al. is not concerned about providing information about the device, it is respectfully submitted that the motivation to combine the system disclosed by Kim et al. with a system using a terminal application such as Feagans is lacking and thus, the combination is improper.

In view of the above remarks, it is respectfully submitted that Feagans adds nothing when taken alone or in combination with Kim et al. that would make the present claimed invention unpatentable. Therefore, it is respectfully submitted that this rejection is satisfied and withdrawal of rejection under 35 U.S.C. 103(a) of claim 8 is respectfully requested.

**Rejection of claim 9 under 35 U.S.C. 103(a)**

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Feagans with Kim et al., and further in view of McKaughan et al. (U.S. Patent No. 6,014,744).

As discussed above, Kim et al. neither disclose nor suggest “capturing said generated status indications” as in the present claimed invention. Additionally, Kim et al. neither disclose nor suggest “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention. As discussed above, Kim et al. merely disclose detecting an error condition and illuminating an LED (or combination of LED’s) in order to display the existence of an error condition. Illuminating the LED’s in Kim et al. is not the same as “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention.



Further, Kim et al. neither disclose nor suggest “displaying said retained captured status indications to a User of said system” as in the present invention. On the other hand, Kim et al. states in column 9 and in Figure 7c that an error condition is stored and the system exits. Kim et al. does not suggest that the stored error code be displayed but rather, the system is to exit upon receiving the error code. Thus, there is no diagnostic feature contemplated by the system of Kim et al.

Feagans discloses a system and method for displaying information from a device on a display screen using a graphical user interface of a terminal program. However, Feagans neither discloses nor suggests “a bi-directions communications system for performing a sequence of operations” as in the present claimed invention. Rather, Feagans discloses an external system running on an operating system which is capable of multitasking that is connected to a device wherein the external system is able to connect to the device and access the functions and status associated therewith. Thus, similarly to Kim et al., Feagans neither discloses nor suggests “capturing said generated status indications” as in the present claimed invention. Also, similarly to Kim et al., Feagans neither discloses nor suggests “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention. Rather, Faegans discloses being able to access, detect and display a devices status.

McKaughan et al. disclose a facility for performing selected operation as part of a booting process of a computer system. McKaughan et al. disclose storing a BOOTING flag that indicates whether the last iteration of the booting process was completed successfully. However, McKaughan et al. neither disclose nor suggest “capturing said generated status indications” as in the present claimed invention. Additionally, similarly to Kim et al. and Feagans, McKaughan et al. neither disclose nor suggest “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention.

In view of the above remarks, it is respectfully submitted that McKaughan et al. add nothing when taken alone or in combination with Kim et al. that would make the

present claimed invention unpatentable. Therefore, it is respectfully submitted that this rejection is satisfied and withdrawal of rejection under 35 U.S.C. 103(a) of claim 9 is respectfully requested.

**Rejection of claims 11, 15 and 18 under 35 U.S.C. 103(a)**

Claims 11, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Feagans with Kim et al., and further in view of McKaughan et al. (U.S. Patent No. 6,014,744).

As discussed above, Kim et al. neither disclose nor suggest “capturing said generated status indications” as in the present claimed invention. Additionally, Kim et al. neither disclose nor suggest “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention. As discussed above, Kim et al. merely disclose detecting an error condition and illuminating an LED (or combination of LED’s) in order to display the existence of an error condition. Illuminating the LED’s in Kim et al. is not the same as “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention.

McKaughan et al. disclose a facility for performing selected operation as part of a booting process of a computer system. McKaughan et al. disclose storing a BOOTING flag that indicates whether the last iteration of the booting process was completed successfully. McKaughan et al. neither disclose nor suggest “capturing said generated status indications” as in the present claimed invention. Additionally, similarly to Kim et al. and Feagans, McKaughan et al. neither disclose nor suggest “retaining said captured status indications following initiation of repetition of said groups of operations” as in the present claimed invention.

Specifically, regarding claim 11, the Examiner states that Kim et al. neither discloses nor suggests “a removable storage medium to be available during re-cycling of said sequentially performed group operations” as is disclosed in the present claimed

invention. Additionally, similarly to Kim et al. and Feagans, McKaughan et al. neither disclose nor suggest "a removable storage medium to be available during re-cycling of said sequentially performed group operations" as in the present claimed invention.

Regarding claims 15 and 18, while McKaughan et al. disclose a BOOTING flag, McKaughan et al. neither disclose nor suggest "a method for capturing indication of system status" in "a bi-directional communication system performing a sequence of operations including groups of one or more individual operations having a status indication" as in the present claimed invention. McKaughan et al. also neither disclose nor suggest "retaining said captured status indications following initiation of repetition of said groups of operations as in the present claimed invention.

In view of the above remarks, it is respectfully submitted that McKaughan et al. add nothing when taken alone or in any combination with Kim et al. and Feagans that would make the present invention as claimed in claims 11, 15 and 18 unpatentable. Therefore, it is respectfully submitted that this rejection is satisfied and withdrawal of rejection under 35 U.S.C. 103(a) of claims 11, 15 and 18 is respectfully requested.

**Rejection of claim 12 under 35 U.S.C. 103(a)**

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al., and further in view of Schieve et al. (U.S. Patent No. 5,455,933).

Claim 12 is a limitation on claim 1 of the present invention, teaching "providing via remote access communication said retained captured status indications as hierarchically ordered fields of data indicators."

As discussed above, Kim et al. neither disclose nor suggest "capturing said generated status indications" as in the present claimed invention. Additionally, Kim et al. neither disclose nor suggest "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention. As discussed above, Kim et al. merely disclose detecting an error condition and

illuminating an LED (or combination of LED's) in order to display the existence of an error condition. Illuminating the LED's in Kim et al. is not the same as "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention.

Schieve et al. disclose a circuit and method for remote diagnosis of personal computers. Schieve et al. disclose sending an indication of a selection of diagnostic routines to be performed from a remote location. Schieve et al. neither disclose nor suggest "capturing said generated status indications" as in the present claimed invention. Additionally, similarly to Kim et al., Schieve et al. neither disclose nor suggest "retaining said captured status indications following initiation of repetition of said groups of operations" as in the present claimed invention.

In view of the above remarks, it is respectfully submitted that Schieve et al. add nothing when taken alone or in combination with Kim et al. that would make the present claimed invention unpatentable. Therefore, it is respectfully submitted that this rejection is satisfied and withdrawal of rejection under 35 U.S.C. 103(a) of claim 12 is respectfully requested.

The Examiner has stated that claims 19-21 are allowed for the reasons contained in the Office Action. The Examiner also stated that claims 3 and 17 are allowable but are currently dependent on a rejected base claim. In view of the above remarks regarding claims 1 and 13, applicant respectfully submits that claims 3 and 17 are allowable as they currently stand.

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Serial No.: 09/669,215

RCA 89,921

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account 07-0832.

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